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Xiangdong Li

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COLLEN IP

THE HOLYOKE MANHATTAN BUILDING

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OSSINING, NY 10562

EXAMINER

CHANG, JEFFREY HAO-WEI

ART UNIT

PAPER NUMBER

3739

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,347	Applicant(s) LI ET AL.	
	Examiner JEFFREY H. CHANG	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's comments and amendments, received 6/22/10, have been fully considered by the Examiner. In particular, Applicant's amendments have obviated the rejections under 35 USC 112 made in non-final office action dated 12/22/09. Currently, claims 2-7 and newly added claims 8-20 are pending.

Claim Objections

2. Claims **2-4, 6-7 and 9-19** are objected to because of the following informalities:

Regarding claim **2**, "and the outputs of the temperature sensor is" should recite --and outputs of the temperature sensor *are*--.

Regarding claim **3**, "the information" (lines 3 and 6-7) should recite --information--. "the wireless terminal (100G) of the computerized medical image workstation" (lines 5 and 7-8) should recite --the wireless terminal (100G) *connected with* the computerized medical image workstation" so as to be consistent with lines 1-2. "the antenna array (100F)" (line 8) should recite --the *transceiver* antenna array (100F)--. "the wireless transceiver module" (line 8) should recite --the *second RF* transceiver module-- so as to be consistent with claim 10. "the bus for processing" should recite --*a* bus for processing--.

Regarding claim **4**, "through GPRS mobile network" should recite --through *a* GPRS mobile network--.

Regarding claim **6**, "is magnetic switch module" should recite --is *a* magnetic switch module--. "the magnetically controlled switch" should recite --*a* magnetically controlled switch--. "the magnet" should recite --*a* magnet--.

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Regarding claim 7, “through corresponding mobile network” should recite --through corresponding *CDMA, GSM, or WLAN networks*--

Regarding claim 9, “A system” should recite --*A medical wireless capsule-type endoscope system*--.

Regarding claim 10, “A system” should recite --*A medical wireless capsule-type endoscope system*--. “the portable image device (100B)” should recite --the portable image *recording* device--. “the bus thereof” should recite --*a* bus thereof--. “the control terminals” should recite --control terminals--.

Regarding claim 11, “A system” should recite --*A medical wireless capsule-type endoscope system*--. “the portable image device (100B)” should recite --the portable image *recording* device--. “the bus thereof” should recite --*a* bus thereof--. “the antenna array (100F)” should recite --the *transceiver* antenna array (100F)--.

Regarding claim 12, “a lens (4) and a power switch module (8)” should recite --a lens (4), a power switch module (8)--.

Regarding claim 13, “is magnetic switch module” should recite --is *a* magnetic switch module--. “the magnetically controlled switch” should recite --*a* magnetically controlled switch-- . “the magnet” should recite --a magnet--.

Regarding claim 14, “the wireless endoscope capsule” should recite --the endoscope device--. “mounted on the inner wall” should recite --mounted on an inner wall--. “the outputs” should recite --outputs--.

Regarding claim 15, “the wireless endoscope capsule” should recite --the endoscope device--. “the outputs” should recite --outputs--.

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Regarding claim **16**, “the wireless endoscope capsule” should recite --the endoscope device--. “mounted on the inner wall” should recite --mounted on an inner wall--. “the outputs” should recite --outputs--.

Regarding claim **17**, “A system” should recite --A *medical wireless capsule-type endoscope* system--. “the image recording device” should read --the *portable* image recording device--.

Regarding claim **18**, “the inner wall” should recite --*an* inner wall--. “the outputs” should recite --outputs--.

Regarding claim **19**, “the inner wall” should recite --*an* inner wall--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims **2-7, 9-11 and 17-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim **9**, it is unclear how an “I/O port” is capable of “transforming the image information into a compressed JPEG format”.

Regarding claim **11**, “a transceiver antenna array”, “a second RF transceiver module”, “a second microprocessor”, and “a storage unit” have been previously recited in parent claim 10.

Further recitation of said limitations in claim 11 renders dependent claims that further limit said

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limitations as ambiguous. “the information received from the wireless endoscope capsule (100A)” lacks antecedent basis.

Regarding claim **17**, “the signal output of the image sensor” lacks antecedent basis. “the image information received is transformed into compressed JPEG format by the first microprocessor (6)” conflicts with claim 9 which states that the “I/O port” performs the compression. “the image information received” lacks antecedent basis. “the collected information” lacks antecedent basis. It is unclear what “the antenna (10)” (first and second lines of last page of claims) is referring to because claim 8 has an “antenna array”, claim 9 has a “transceiver antenna”, and claims 10 and 11 have a “transceiver antenna array”. “are sent by the first RF transceiver module (9)” is confusing because claim 10 states that the second RF transceiver module sends “the control commands”.

Regarding claim **20**, it is unclear what “the information” refers to because parent claims have multiple recitations of “information”. “the storage medium reader (100D)” lacks antecedent basis.

Claims **2-7, 10, 18, and 19** are rejected for depending on rejected parent claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims **8, 12, 14, and 15** are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita et al. (US 2003/0085994) (hereinafter as “Fujita”).

Regarding claim **8**, Figs. 1A-B of Fujita disclose a medical wireless capsule-type endoscope system comprising: a wireless endoscope capsule (3), an antenna array (11), a portable image recording device (i.e. external unit 5), a storage medium (i.e. hard disk 29; see Fig. 3), and a computerized medical image workstation (i.e. terminal device/PC 7).

Regarding claim **12**, Fig. 2 of Fujita discloses that the wireless endoscope device including a housing (i.e. clear external member 14), an optical front cover (see [0168] where capsule body may be a cylinder portion with round covers covering both ends) connected to the housing, an LED array (i.e. LEDs 18) arranged within the housing in sequence (see Fig. 2 where at least two LEDs 18 are shown), a lens (i.e. objective lens 15), a power switch module (i.e. send/receive switch 36; see Fig. 3), an image sensor (i.e. CMOS 17), a first microprocessor (i.e. processing circuit 19), containing an I/O port (in order for processing circuit 19 to communicate with CMOS 17, LEDs 18, and communication processing circuit 20, processing circuit 19 must have I/O ports), a first RF transceiver module (i.e. communication processing circuit 20), and a transceiver antenna (23).

Regarding claim **14**, Fujita discloses a pressure sensor (see [0173]) mounted within the housing of the wireless endoscope capsule (3), wherein the pressure sensor is closely mounted on the inner wall of the housing (see [0174] where pressure sensor measures pressure of a “tube cavity acting on the external surface of the capsule”, and therefore would be “closely mounted” on an inner wall), and the outputs of the pressure sensor are connected to the I/O ports of the first

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microprocessor (see, e.g., Fig. 18 where sensor 113 is connected to a circuit substrate 114, which performs processing of the sensor signals).

Regarding claim **15**, Fujita discloses a temperature sensor mounted within the housing of the wireless endoscope capsule (3), wherein the outputs of the temperature sensor are connected to the I/O ports of the first microprocessor (see, e.g., Fig. 18 where sensor 113 is connected to a circuit substrate 114, which performs processing of the sensor signals).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim **16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita (US 2003/0085994). Fujita discloses a temperature sensor or a pressure sensor (see [0173]) mounted within the housing of the wireless endoscope capsule (3), wherein the pressure sensor is closely mounted on the inner wall of the housing (see [0174] where pressure sensor measures pressure of a "tube cavity acting on the external surface of the capsule", and therefore would be "closely mounted" on an inner wall), and the outputs of the temperature sensor and the pressure sensor are connected to the I/O ports of the first microprocessor (see, e.g., Fig. 18 where sensor 113 is connected to a circuit substrate 114, which performs processing of the sensor signals).

It is noted that Fujita does not disclose incorporating both a temperature sensor and a pressure sensor into the capsule at the same time. However, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate both a temperature sensor and a pressure sensor into the capsule at the same time so as to provide more diagnostic measurements using a single capsule.

11. Claims **2, 9-11, and 17-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita (US 2003/0085994) in view of Glukhovsky et al. (US 2003/0043263) (hereinafter as "Glukhovsky").

Regarding claim **9**, Fig. 2 of Fujita discloses that the wireless endoscope capsule includes a housing (i.e. clear external member 14), an optical front cover (see [0168] where capsule body may be a cylinder portion with round covers covering both ends) connected to the housing, an

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LED array (i.e. LEDs 18) arranged within the housing in sequence (see Fig. 2 where at least two LEDs 18 are shown), a lens (i.e. objective lens 15), a power switch module (i.e. send/receive switch 36; see Fig. 3), an image sensor (i.e. CMOS 17), a first microprocessor (i.e. processing circuit 19), containing an I/O port (in order for processing circuit 19 to communicate with CMOS 17, LEDs 18, and communication processing circuit 20, processing circuit 19 must have I/O ports), a first RF transceiver module (i.e. communication processing circuit 20), and a transceiver antenna (23).

It is noted that Fujita does not disclose JPEG image compression. However, Glukhovsky discloses JPEG image compression (see [0025]). It would have been obvious to one having ordinary skill in the art at the time of invention to incorporate JPEG image compression taught by Glukhovsky into the capsule endoscope taught by Fujita as compression of image data prior to transmission reduces the amount of data transferred and therefore saves battery life. Furthermore, JPEG compression is a conventionally used compression technique for images.

Regarding claim **10**, Fig. 4 of Fujita discloses that the portable image device (i.e. external unit 5) includes a transceiver antenna array (11a-d), a second RF transceiver module (i.e. sending circuit 32, receiving circuit 33, and control circuit 34), a second microprocessor (i.e. signal processing circuit 35) and a storage unit (i.e. hard drive 29) connected with the bus thereof (hard drive 29 is connected to signal processing circuit 35), wherein the second RF transceiver module sends control commands from the control terminals of the second microprocessor to the wireless endoscope capsule (see, e.g., [0059] where external unit 5 transmits control signals to capsule 3).

Regarding claim **11**, Fig. 4 of Fujita discloses that the portable image device (i.e. external unit 5) includes a transceiver antenna array (11a-d), a second RF transceiver module (i.e. sending

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circuit 32, receiving circuit 33, and control circuit 34), a second microprocessor (i.e. signal processing circuit 35) and a storage unit (i.e. hard drive 29) connected with the bus thereof (hard drive 29 is connected to signal processing circuit 35), wherein the second RF transceiver module (32-34) communicates the information received from the wireless endoscope capsule by the antenna array to the second microprocessor (see [0059] where receiving circuit 33 “sends received image signals to the signal processing circuit 35”).

Regarding claim **17**, Fujita discloses that the signal output of the image sensor (i.e. CMOS 17) is connected with the I/O port of the first microprocessor (i.e. processing circuit 19; see [0052]); wherein the image information received is sent to a data receiving terminal of the first RF transceiver module (i.e. communication processing circuit 20); the first RF transceiver module sends the collected information to the portable image recording device (i.e. external unit 5) via the antenna (23) after the control commands received from the image recording device by the antenna are sent by the first RF transceiver module to the first microprocessor for processing (see [0059] and [0063] where control signals sent from external unit 5 to capsule 3 dictate when capsule 3 is to begin image transmission); wherein the operating modes of the LED array, the image sensor and the first RF transceiver module are controlled by the I/O ports of the first microprocessor (19; see [0052] where processing circuit 19 communicates with LEDs 18, CMOS 17, and communication processing circuit 20). It is noted that Fujita does not disclose JPEG image compression. However, Glukhovsky discloses JPEG image compression (see [0025]).

Regarding claims **2, 18, and 19**, Fujita disclose a temperature sensor or a pressure sensor (see [0173]) mounted within the housing of the wireless endoscope capsule (3), wherein the

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pressure sensor is closely mounted on the inner wall of the housing (see [0174] where pressure sensor measures pressure of a "tube cavity acting on the external surface of the capsule", and therefore would be "closely mounted" on an inner wall), and the outputs of the temperature sensor and the pressure sensor are connected to the I/O ports of the first microprocessor (see, e.g., Fig. 18 where sensor 113 is connected to a circuit substrate 114, which performs processing of the sensor signals).

It is noted that Fujita does not disclose incorporating both a temperature sensor and a pressure sensor into the capsule at the same time. However, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate both a temperature sensor and a pressure sensor into the capsule at the same time so as to provide more diagnostic measurements using a single capsule.

Regarding claim **20**, Fujita disclose that the information is recorded in the storage medium (i.e. hard disk 29) and read into the computerized medical image workstation (7) by the storage medium reader (i.e. cradle 6) for processing, displaying and analyzing (see Fig. 1B where hard disk 28, located within external unit 5, transfers data to terminal device 7 for processing, displaying and analyzing).

12. Claims **3 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita (US 2003/0085994) in view of Glukhovsky (US 2003/0043263), and further in view of Krill (US 2004/0122315).

Regarding claim **3**, Figs. 1A-B of Fujita disclose a wireless terminal (i.e. cradle 6) connected with the computerized medical image workstation (i.e. terminal device 7); the information from the control terminals of the second microprocessor (i.e. signal processing

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circuit 35; Fig. 4) of the portable image recording device (i.e. external unit 5; Fig. 4) is sent to the wireless terminal (Fig. 1B shows external unit 5 transferring data to terminal device 7 using cradle 6) of the computerized medical image workstation (7) by the second RF transceiver module (32-34; e.g. receiving circuit 33 aids in transfer of data because it collects image data from capsule 3) of the portable image recording device.

It is noted that Fujita does not explicitly disclose that terminal device 7 transmits information to capsule 3. However, Fig. 4 of Krill discloses that information received from the wireless terminal (within remote medical monitoring station 30) of the computerized medical image workstation (i.e. remote medical monitoring station 30) by the antenna array (11a-d of Fujita; Fig. 4) is sent by the wireless transceiver module of the portable image recording device (i.e. transceiver 20) to the second microprocessor by the bus for processing, and then sent to wireless endoscope capsule (i.e. capsule 10). Paragraphs [0016] and [0033] of Krill further disclose transmission of control signals from remote monitoring stations to the capsule. It would have been obvious to one having ordinary skill in the art at the time of invention to incorporate wireless transmission and controlling capsule operation using a remote monitoring station taught by Krill into the endoscope system of Fujita so as to make such a system more portable and allow the physician more control over the capsule from longer distances.

Regarding claim 5, Figs. 1A-B and 4 of Fujita disclose a storage medium reader (i.e. cradle 6) connected with the computerized medical image workstation (i.e. terminal device 7) and a storage medium (i.e. hard drive 29), and the storage medium is connected with the second microprocessor (i.e. signal processing circuit 35) of the portable image recording device (i.e. external unit 5).

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13. Claims **4 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita (US 2003/0085994) in view of Glukhovsky (US 2003/0043263), and further in view of Krill (US 2004/0122315) and Kallio (US 2002/0147008).

Regarding claims **4 and 7**, it is noted that Fujita does not disclose the use of GPRS (as per claim 4), or CDMA, GSM, or WLAN (as per claim 7) networks. However, Fig. 4 of Krill discloses a portable image recording device (i.e. transceiver 20) and medical image workstation (i.e. remote medical monitoring station 30) with a wireless terminal and that these components communicate via a cellular network (see [0033]). Furthermore, Kallio discloses that commonly used cellular networks include GPRS, CDMA, GSM, and WLAN (see [0023]). Therefore, Krill in view of Kallio discloses that the system also includes a GPRS, CDMA, GSM or WLAN terminal (Kallio: [0023] where communication via GPRS, CDMA, GSM, or WLAN networks require GPRS, CDMA, GSM, or WLAN terminals, such as cellular radio towers) and a wireless terminal connected with the computerized medical image workstation (i.e. remote medical monitoring station 30; Fig. 4 of Krill), the portable image recording device (i.e. transceiver 20; Fig. 4 of Krill) exchanges data with the GPRS, CDMA, GSM or WLAN terminal, and the GPRS or CDMA, GSM or WLAN terminal exchanges data with wireless terminal of the computerized medical image workstation through GPRS or CDMA, GSM or WLAN mobile networks (see Fig. 4 and [0033] of Krill where portable image recording device 20 and medical image workstation 30 communicate via cellular network and [0023] where conventionally used cellular networks include GPRS, CDMA, GSM, and WLAN).

It would have been obvious to one having ordinary skill in the art at the time of invention to modify the endoscope system taught by Fujita with cellular, i.e. GPRS, CDMA, and GSM, or

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WLAN communications between an external transceiver and a remote medical station as taught by Krill and Kallio as use of a cellular or WLAN network allows the patient who ingested the capsule endoscope to remain active, i.e. step out of the hospital, while still being monitored.

Furthermore, it would have been obvious to use GPRS, CDMA, GSM, or WLAN networks as communication means because such networks are readily available and well known in the art, obviating the need for the physician to create his own network.

14. Claim **6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita (US 2003/0085994) in view of Glukhovsky (US 2003/0043263), and further in view of Iddan (US 2004/0254455). It is noted that Fujita does not specifically disclose a magnetically controlled switch. However, Iddan discloses that a power switch module (200) is a magnetic switch module and the magnetically controlled switch of the magnetic switch module is switched on in the magnetic field, and after the magnet is removed, it is switched off (see [0033]). It is noted that although Iddan discloses a normally closed switch that opens (turns off) in the presence of a magnetic field, a normally open switch that closes (turns on) in the presence of a magnetic field could easily be substituted for the normally closed switch. It would have been obvious to one having ordinary skill in the art at the time of invention to combine the power switch module taught by Iddan with the capsule endoscope taught by Fujita so as to save energy and prolong capsule battery life by having the capability to turn the capsule on and off (see Iddan [0033]).

15. Claim **13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita (US 2003/0085994) in view of Iddan (US 2004/0254455). It is noted that Fujita does not specifically disclose a magnetically controlled switch. However, Iddan discloses that a power switch module (200) is a magnetic switch module and the magnetically controlled switch of the magnetic switch

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module is switched on in the magnetic field, and after the magnet is removed, it is switched off (see [0033]). It is noted that although Iddan discloses a normally closed switch that opens (turns off) in the presence of a magnetic field, a normally open switch that closes (turns on) in the presence of a magnetic field could easily be substituted for the normally closed switch. It would have been obvious to one having ordinary skill in the art at the time of invention to combine the power switch module taught by Iddan with the capsule endoscope taught by Fujita so as to save energy and prolong capsule battery life by having the capability to turn the capsule on and off (see Iddan [0033]).

Response to Arguments

16. Applicant's arguments with respect to newly added claim 8 and amended claim 3 have been considered but are moot in view of the new ground(s) of rejection. However, it should also be noted that Applicant argued that the capsule invented by Applicant includes an antenna array, and that the Prior Art does not teach a capsule having an antenna array. The Examiner disagrees. First, the Specification and Drawings submitted by the Applicant show that the portable receiving device has an antenna array (100F), not the capsule. Second, claim 8 does not set forth that the capsule has an antenna array, only that the "medical wireless capsule-type system" comprises an antenna array. Third, Glukhovsky (US 2003/0043263) and Iddan (US 2004/0254455), cited in both the non-final office action and this office action, disclose an external receiver with an antenna array (see [0015] of Glukhovsky and [0035] of Iddan). Finally, Figure 14 of the cited reference, Fujita (US 2003/0085994), in fact does disclose an array of antennas 71.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY H. CHANG whose telephone number is (571) 270-5336. The examiner can normally be reached on Monday - Thursday, 8:00 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. H. C./
Examiner, Art Unit 3739

/John P Leubecker/
Primary Examiner, AU 3739